

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Dixon Quick Coupling

North Carolina Manufacturing Extension Partnership

Dixon Quick Coupling Applies Lean to Reduce Unscheduled Downtime

Client Profile:

Dixon Quick Coupling (DQC) manufactures and distributes a broad range of hydraulic and pneumatic quick disconnect couplings. The privately-held company employs 90 people at its facility in Charlotte, North Carolina.

Situation:

Dixon Quick Coupling had no preventive or predictive maintenance program. Problems with excessive equipment reliability and stability, along with excessive man hours, were eroding the company's revenues. Growing lead and delivery times were affecting customer satisfaction and ultimately DQC's ability to maintain its client base. Unscheduled downtime of equipment has no known cause due to the lack of a collection of data. DQC contacted the North Carolina Manufacturing Extension Partnership (NCMEP), a NIST MEP network affiliate, for help.

Solution:

In January 2004, NCMEP conduct a two-day project to introduce DQC to Value Stream Mapping concepts. NCMEP assisted DQC in drawing a current state map and provided guidance in drawing a future state map and developing continuous improvement projects. Follow-on activities included in-plant instruction in Lean manufacturing principles. NCMEP and DQC developed a layout of key equipment components for making adjustments to lathe equipment and to facilitate operator training in blue print reading. Overall department efficiency was improved by establishment of a data driven approach to total productive maintenance. Lean principles were shared with the entire plant, and employees understand the value of a fully integrated, cross-trained team in which everyone can step in and handle any process. Employees are now empowered by implementing tools from their Lean toolbox and are accountable for their work. Through a Lean four-day set-up reduction plan, all equipment is now monitored for best throughput, sufficient maintenance and efficiency.

Results:

- * Increased sales by \$7 million.
- * Retained sales of \$1 million.
- * Reduced set up time by 50 percent.
- * Created 5 jobs.

Testimonial:

"We've got to be competitive -- we've got to drive out waste, and everyone is accountable. Independent thinking is becoming part of the job description at Dixon Quick Coupling. We get more sales as a function of Lean."

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Phil Fisher, Quality Assurance and Lean Manager